SITE SEARCH

GO

DIE CASTING - HIGH PRESSURE
MELTING FURNACE
METAL TREATMENT
METAL TRANSFER
FILTRATION
HOLDING FURNACE
CASTING
POURING
HEAT TREATING
DIE CASTING - LOW PRESSURE
MELTING FURNACE
METAL TREATMENT
METAL TRANSFER
FILTRATION
CASTING
HEAT TREATING
INVESTMENT MOLD
MELTING FURNACE
METAL TREATMENT
FILTRATION
CASTING
POURING
HEAT TREATING
SAND CASTING
MELTING FURNACE
METAL TREATMENT
METAL TRANSFER
FILTRATION
HOLDING FURNACE
CASTING
POURING
HEAT TREATING
COREROOM
PERMANENT MOLD
MELTING FURNACE
METAL TREATMENT
METAL TRANSFER
FILTRATION
HOLDING FURNACE
CASTING
POURING
HEAT TREATING

ALUMINIUM FOUNDRY
GLASS
STEEL
SPECIALITY
POWDER METAL

FOUNDRY : PERMANENT MOLD : HEAT TREATING (bookmark this page)

INSULATING BOARDS

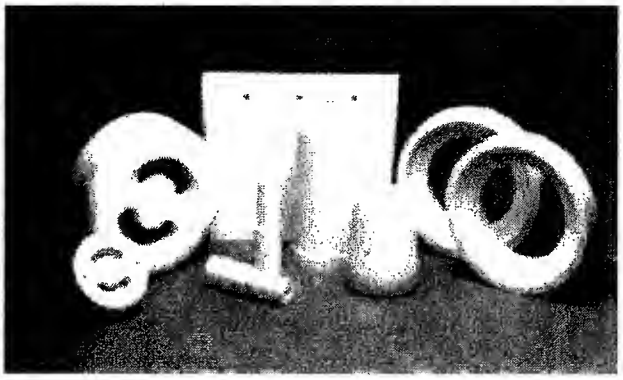
Pyrotek offers a variety of insulating boards for foundry casting operations. Choose from calcium silicate, fibreglass reinforced calcium silicate and a specially formulated structural insulating board.
Click here to Request a Quote
Click here to have a sales person contact me

Calcium Silicate Refractory Board - B-3
Pyrotek B-3 is a highly versatile calcium silicate board for use in a variety of machined shapes and general purpose applications. Among its uses, Pyrotek B-3 is established as the industry standard for high efficiency furnace insulation. Our machine shops can produce complex components to your exact specifications.

Applications include furnace insulation, floats, baffle plates, machined spouts, dams, trough liners and transition plates.

Advantages:
- Asbestos-free
- Low thermal conductivity
- Resistant to thermal shock
- Non-wetting
- Good machining characteristics

For more information, Click Here



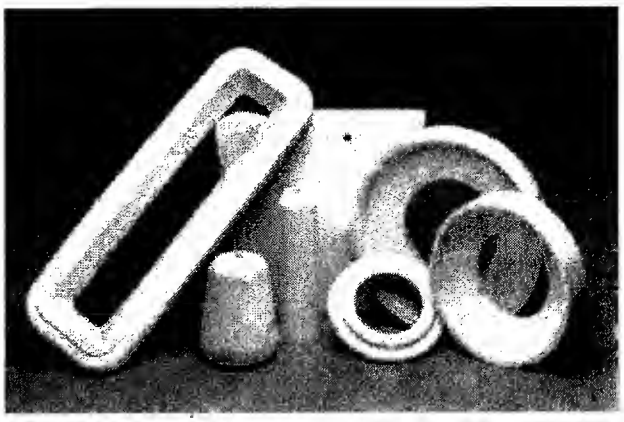
Fibreglass Reinforced Calcium Silicate Refractory Board – N-14
Pyrotek N-14 is a fibreglass reinforced calcium silicate board offering superior strength. The unique formulation of Pyrotek N-14 gives it excellent machining characteristics for precision machined parts. Our machine shops can produce complex components to your exact specifications.

Applications include dip tubes, pouring spouts, hot top rings, stopper pins, end dams, floats and launders.

Advantages:
- Asbestos-free
- Low thermal conductivity
- Resistant to thermal shock
- Non-wetting

For more information, Click Here

Graphite Fibre Refractory Board – N-17
Pyrotek N-17 is a graphite fibre reinforced, high purity, calcium silicate board developed exclusively for the nonferrous casting industry. The patented formulation of Pyrotek N-17 makes it unparalleled in strength, low shrinkage and resistance to thermal shock. Our machine shops can produce complex components to your exact specifications.



Applications include transition plates, trough liners, floats, machined spouts and head boxes.

Advantages:
- Asbestos-free
- Low thermal conductivity
- Resistant to thermal shock
- Non-wetting
- Good machining characteristics

For more information, Click Here

Structural Insulating Board - E-1
Pyrotek's E-1 is a light weight, high-temperature board designed to combine structural strength and high insulating value. Structural insulation panels made from E-1 can be painted. Fibres generated while cutting E-1 are classified by OSHA as nuisance dust only.

Applications include structural insulation panels, furnace insulation and machined parts.

Advantages:
- Strong light weight material
- Easily cut and machined
- Economical

For more information, Click Here

Related Products
Sorry, there are no files available online at this time.

Related Technical Papers
Sorry, there are no files available online at this time.

Product Brochures
Sorry, there are no files available online at this time.

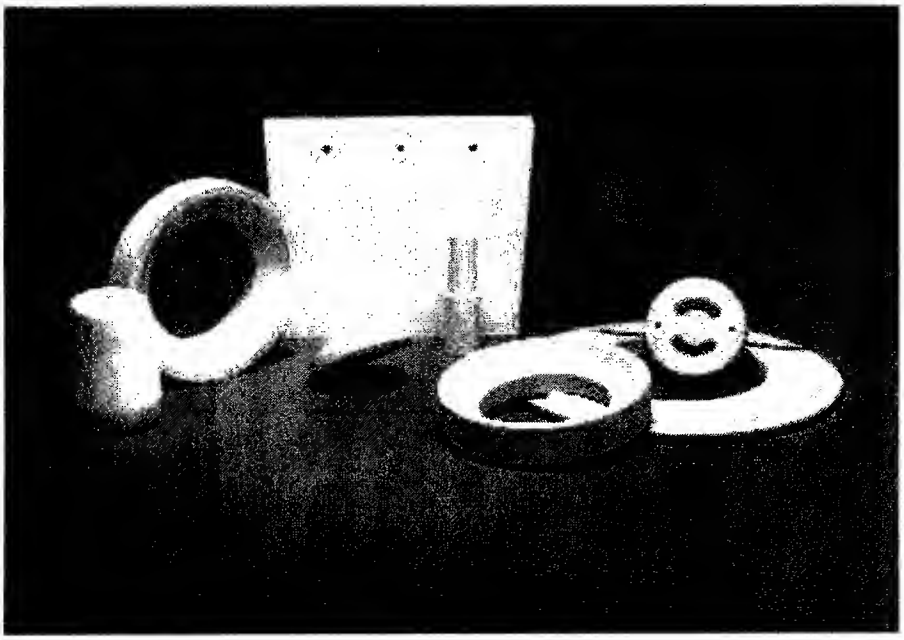
Data Sheets
121 B-3 Refractory Board - English (Letter)
121 B-3 Refractory Board - English (A4)
121 M-1 Feuerfestplatte - German (A4)
121 B-3 Panneau Refractaire - French (A4)
121 Lamina Refractaria B-3 - Spanish (A4)
121 B-3 ОГНЕУПОРНЫЙ КАРТОН - Russian (A4)
120 N-17 Refractory Board - English (Letter)
120 N-17 Refractory Board - English (A4)
120 N-17 Feuerfestplatte - German (A4)
120 Lamina Refractaria N-17 - Spanish (A4)
120 N-17 Pannello refrattario - Italian (A4)
120 N-17 Refractory Board - French (A4)
122 N-14 Refractory Board - English (Letter)
122 N-14 Refractory Board - English (A4)

122 N-14 Feuerfestplatte - German (A4)
122 Lamina Refractaria N-14 - Spanish (A4)
122 N-14 Pannello refrattario - Italian (A4)
122 N-14 ОГНЕУПОРНАЯ ПЛИТА - Russian (A4)
183 E-1 Insulating Board - English (Letter)
183 E-1 Insulating Board - English (A4)
(B3, N14, N17 & S-1100 - Chinese)

MSDS Sheets
Click here to Request an MSDS Sheet

B-3 REFRACTORY BOARD

FOR PRECISION MACHINED SHAPES



Pyrotek B-3 is a highly versatile calcium silicate board for use in a variety of machined shapes and general purpose applications. Among its uses, Pyrotek B-3 is established as the industry standard for high efficiency furnace insulation. Our machine shops are equipped with CNC tooling equipment to produce complex components to customer specifications.

APPLICATIONS

- Floats
- Machined spouts
- Baffle plates
- Dams
- Trough liners
- Transition plates

ADVANTAGES

- Asbestos-free
- Low thermal conductivity
- Resistant to thermal shock
- Non-wetting
- Good machining characteristics

COMPOSITION

SiO_2	51.7%
CaO	39.7%
Al_2O_3	1.0%
Fe_2O_3	0.7%

Pyrotek™
Improving Performance

AVAILABLE FORMS

Boards: 3,000 mm x 1,220 mm
118 in x 48 in

1,500 mm x 1,220 mm
59 in x 48 in

PHYSICAL PROPERTIES

Density
850 kg/m^3
55 lb/ft^3

Loss On Ignition
3.1% max

Coefficient Of Thermal Expansion
6.1 x 10^{-6}/°C
3.3 x 10^{-6}/°F

Maximum Service Temperature
850°C
1,560°F

Continuous Service Temperature
800°C
1,470°F

Compressive Strength ***(C 165)†***
15 MPa
2,176 lb/in^2

Flexural Strength ***(C 203)†***
8 MPa
1160 lb/in^2

AVAILABLE THICKNESS

mm	13, 19, 25, 32, 38, 51, 76, 101
in	0.50, 0.75, 1.00, 1.25, 1.50, 2.00, 3.00, 4.00

THERMAL CONDUCTIVITY *(DIN 51046)†*

°C	°F	W/(m · K)	BTU-in/hr/ft^2/°F
100	210	0.19	1.31
300	570	0.20	1.35
500	930	0.20	1.35
750	1382	0.26	1.50

SCREW GRIP (PULL) PENETRATION DEPTH

mm	in	kg	lb
13	0.51	50	110
19	0.75	90	198
22	0.87	130	286

THERMAL SHRINKAGE AFTER 24 HOURS *(C 356 60)†*

°C	°F	Linear %	Thickness %
650	1,200	0.05	0.25
700	1,290	0.05	0.42
750	1,380	0.15	0.50
850	1,560	0.20	1.30

PERCENT SHRINKAGE FOR 12 HOURS

750°C/1380°F
0.1/0.4 length-width/thickness

† Based on ASTM standards

Note: The physical and chemical properties listed represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice.

Pyrotek's worldwide locations provide fast reliable service.
Please contact us for additional information.

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